

ZABUSOV, G.I. (Kazan', ul. Volkova, 48, kv. 1); MASLOV, A.P.  
(Kazan', ul. Bauman, 29/11, kv. 22)

Some data on Timofeev's apparatus. Arkh. anat., gist. i embr.  
45 no. 10:13-19 O '63. (MIRA 17:9)

1. Kafedra gistologii (zav. - prof. G.I.Zabusov) Kazanskogo  
meditsinskogo instituta.

ZABUSOV, G.I., prof.; MASLOV, A.P., prof.

Use of new Soviet stains in microscopi technic. Kaz.med.filmr. 40  
no.4:102 JI-Ag '59. (MIRA 13:2)

1. Iz kafedry gistologii (ispolnyayushchiy obyazannosti navednyushche-  
go - prof. G.I. Zabusov) Kazanskogo meditsinskogo instituta.  
(STAINS AND STAINING (MICROSCOPY))

ZABUSOV, G.I. (Kazan', ul. Volkova, 48, kv. 1); MASLOV, A.P. (Kazan', ul. Bauman, 29, kv. 22)

Some problems concerning the structure and reactivity of the myoneural synapses. Arkh. anat., gist. i embr. 47 no. 12: 3-19 (MIRA 18:4)  
D '64.

ZABUSOV, M., podpolkovnik; NEVLER, V., kapitan

How we prepare the relief for drivers of stream-crossing and  
landing craft. Voen. vest. 42 no.11:88-89 N '62. (MIFA 16:10)

(Stream crossing, Military)

RAZUMOV, A.I.; ZABUSOVA, N.G.

Phosphinic and phosphonic acid series. Report No.14: Some derivatives diethylcarboxymethylphosphine oxide. Trudy KCHTI no.30:28-36 '62.

Phosphinic and phosphonic acid series. Report No.15: Atomic refraction of phosphorus in phosphine oxides. 37-39 (MIRA 16:10)

RAZIMOV, A.I.; ZABUSOVA, N.G.

Phosphinic and phosphonic acid series. Part 14: Mechanism of the reaction of esters of trivalent phosphorus with esters of halogen-substituted acids. Zhur.ob.khim. 32 no.8:2688-2691 Ag (MIRA 15:9) '62.

1. Kazanskiy khimiko-tehnologicheskii institut.  
(Phosphinic acid) (Phosphonic acid)

RAZUMOV, A.I.; ZABUSOVA, N.G.

Derivatives of phosphinic and phosphonic acids. Part 15: Atomic  
refraction of phosphorus in phosphine oxides. Zhur.ob.khim. 32  
no.8:2691-2693 Ag '62. (MIRA 15:9)

1. Kazanskiy khimiko-tekhnologicheskiy institut.  
(Phosphorus—Optical properties)  
(Phosphine oxide)

I 42956-66 EWT(1)/EWT(m)/EWP(1) RO/RM

SOURCE CODE: UR/0081/66/000/007/H121/H121

ACC NR: AR6024992

AUTHOR: Zabusova, N. G.; Razumov, A. I.; Tarziyolova, T. A.

TITLE: Studies in the series of derivatives of phosphonous and phosphonic acids.  
Report No. 30. Synthesis of nitrogen- and sulfur-containing derivatives of oxides of  
dialkylcarboxymethylphosphine

SOURCE: Ref. zh. Khimiya, Part I, Abs. 7Zh399

REF SOURCE: Tr. Kazansk. khim-tekhnol. in-ta, vyp. 33, 1964, 167-170

TOPIC TAGS: organic nitrogen compound, organic sulfur compound, organic phosphorus compound

ABSTRACT: In a search for biologically active compounds,  $R_2O(O)CH_2CONR'R''$  (I; always  $R=Et$ ),  $R_2P(O)R'$  (II), and  $R'P(O)CH_2CONR_2''$  (III) were obtained by two methods. In method A, a mixture of  $R_2POR$  and  $ClCH_2CONR'R''$  is heated in a  $CO_2$  atmosphere until the reaction starts, and the substances are crystallized from octane or heptane. In method B, a mixture of an amine and  $R_2P(O)CH_2COOR$  is heated to  $150^\circ$ , and after driving off the alcohol, the substances are separated.  $R'$ ,  $R''$ , the method of synthesis, the yield in %, b. p. in  $^\circ C/mm$  or m. p. in  $^\circ C$ ,  $n_{D20}$ ,  $d_4^{20}$  are given for I: H, H, A, 88, 77-8, -, -, R, R, A, 71, 142-3/0.18, 1.4864, 1.0427; Ph, Ph, A, 68.5 (by method B 64%), 8809, -, -, H, Bu, A, 64.4, 54, -, -, H, PhCH<sub>2</sub>, B, 72, 95, -, -, H, Ph, B, 78.5, 126, -, -, H, p-MeC<sub>6</sub>H<sub>4</sub>, A, 37, 104, -, -, for II (except  $R''$ ): CH<sub>2</sub>CN, A, 83, 135-6/0.3 m. p.  $1^\circ$ ,

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L 42956-66

ACC NR: AR6024992

1.4790, 1.0764;  $\text{CH}_2\text{COSR}$ , A, 35, 61, -, -; for III: Pr, Ph, B, 66, 95, -, -; Fr, Ph, A, 63, 117, -, -. Some of I-III have a spasmolytic effect. For Report 29, see RZhKhim, 1966, 1Zh415. V. G. [Translation of abstract]

SUB CODE: 07

Card

2/2

SP

ZABUSOVA-ZHDANOVA, Z.I.

Planarians of the Armenian S.S.R. Izv. AN Arm. SSR. Biol.  
nauki 16 no.4:99-106 '63. (MIRA 16:6)

1. Kazanskiy sel'skokhozyaystvennyy institut.  
(ARMENIA--PLANARIA)

ZABUSOVA-ZHDANOVA, Z.I.

Planarians of the Far East. Uch.zap.Kaz.un. 120 no.6:112-121  
'60. (MIRA 16:2)

(Soviet Far East--Planaria)

ZABUSOVA, Zhdanova  
ZABUSOVA-ZHDANOVA, Z.I.

New data on the distribution of planarians in Siberia. Sam. po  
fauna i flore Sib. no. 18:50-54 '55. (MIRA 11:1)

1. Kazanskiy sel'skokhozyaystvennyy institut imeni A.M. Ger'kogo.  
(Siberia--Platyhelminthes)

ZABUTOV, S.A.

Some problems in the control of the instrument industry. Izv.tekh.  
no.7:57-59 J1 '62. (MIRA 15:6)  
(Instrument industry)

ZABUTOV, S.A.

Measures for improving the quality of manufactured instru-  
ments. Izv.tekh. no.7:6-8 JI '60. (MIRA 13:7)  
(Krasnodar--Instrument manufacture)

ZABUTOV, S.A.; TSININ, P.N.

Maintenance and repair of weighing machines in rural districts.  
izm.tekh. no.1:59-60 Ja '60. (MIRA 13:5)  
(Weighing machines--Maintenance and repair)

ZABUTYY, M.B. (Riga)

Congenital bilateral otic fistula. Vest. oto-rin. 19 no.1:102 Ja-F  
'57 (MIRA 10:4)

(EAR--ABNORMALITIES AND DEFORMITIES)  
(FISTULA)



KHODYAKOV, N.D., prof., doktor meditsinskikh nauk; SMIRNOVA, I.N., kand.med.  
nauk; ZABUTYY, M.B.

Second Interrepublic Scientific Conference of Otorhinolaryngo-  
logists of the Soviet Baltic States. Vestn. otorinolaring. 25  
no.3:117-121 '63 (MIRA 17:1)

GAUDYN', E.P.; ZABUTYY, M.B.; KACHANE, L.K.

Prof. Nikolai Dmitrievich Khodiakov; on his 60th birthday. Vest. storin.  
21 no.2:113 Mr-Apr '59. (MIRA 12:4)

(BIOGRAPHIES,

Khodiakov, Nikolai D. (Rus))

~~ЗАДУХЛИВ~~ (Higa)

Penetration of a hair into the throat through the eustachian tube.  
Vest. oto-rin. 19 no.1:108 Ja-F '57 (MLRA 10:4)  
(THROAT--FOREIGN BODIES)

ZABUTNYI, N.B.

KHODYAKOV, N.D., prof.; ZABUTNYI, N.B.

First interrepublic conference of otolaryngologists of the Estonian,  
Lithuanian, and Latvian S.S.R. Vest.oto-rin. 19 no.6:114-117 M-D  
'57 (MIRA 11:3)

1. Predsedatel' pravleniya obshchestva otolaringologov Latvyskoy  
SSR (for Khodyakov). 2. Sekretar' Pervoy mezhrespublikanskoy  
nauchnoy konferentsii otolaringologov Estonskoy, Litovskoy i Latvyskoy  
SSR (for Zabutnyy)

(ESTONIA---OTORHINOLARYNGOLOGY)

(LITHUANIA---OTORHINOLARYNGOLOGY)

(LATVIA---OTORHINOLARYNGOLOGY)

ZABYALOV, S. I.

3  
② Ch...  
1698. Synthesis of Steroid Compounds and Their Re-  
lated Substances. XXVII. Condensation of Cyclic ~~Di-~~  
ketones With Vinylketones and Conversion of the Products.  
Pt. 2. (Russian.) S. I. Zabyalov and S. I. Zabyalov, Zhurnal  
Obshchei Khimii, v. 23 (85), no. 10, Oct. 1953, p. 1703-1712.  
9 ref.

ZAB'YALOV, Vsevoled V., n. sotrudnik na BAN

Mediaphoresis; investigations of the vegetative nervous system  
with the aid of mediatory electrophoresis. Izv. med. inst., Sofia  
Vol. 9-10:113-167 1954.

(AUTONOMIC NERVOUS SYSTEM, Function tests,  
electrophoretic technic)  
(ELECTROPHORESIS,  
autonomic NS funct. test)

ZABYAN, G. D.

FA 245T83

USSR/Meteorology - Upper Fronts

Nov 52

"Problem of the Vertical Extension of Tropospheric Frontal Separations," G. D. Zabyan, Cand Physicomath Sci, Moscow Central Inst of Forecasting

"Meteorol i Gidrol" No 11, pp 15-21

Analyzes baric topography charts, OT 500/000, OT 225/500, OT 97/225, and charts of isallohyps OT 500/1000, OT 225/500 and OT 97/225. Concludes that fronts located in the lower half of the troposphere extend up to the tropopause. Charts are for Europe, 30 Mar 42.

245T83

ZABYLIN, M.I. (Novosibirsk)

Study of the vibrations of foundations under vertical compressors.  
Osn., fund. i mekh. grun. 6 no.5:10-11 '64.

(MIRA 17:12)



BELKINA, T.M.; ZABYRINA, K.I.; LIMOVA, I.G.; FROMBERG, M.B.

Adhesive compositions for film electric insulation cardboard.  
Plast. massy no.8:64-67 '64.

(MIRA 17:12)

SOKOLOV, Nikolay Nikolayevich; ANDRIANOV, K.A., red.; AKOPYAN, A.A., red.;  
BIRYUKOV, V.G., glavnyy red.; BUTKEVICH, G.V., red.; GRANOVSKIY, V.L., red.;  
GERTSENBERG, G.R., red.; ~~ZABYINA, K.I., red.~~; KALITVANSKIY, V.I., red.;  
KLYANFEL'D, B.H.; SAKOVICH, A.A.; TIMOFEEV, P.V.; PASTOVSKIY, V.G.;  
TSEYROV, Ye.M.; FRIDMAN, A.Ya.; SHEKATYEV, A.M.; TIMOKHINA, V.I., red.

[Methods for the synthesis of organopolysiloxanes] Metody  
sintezy poliorganosiloksanov. Moskva, Gos.energ. izd-vo, 1959.  
198 p. (Moscow. Vsesoiuznyi elektrotekhnicheskii institut.  
Trudy, no.66) (MIRA 12:5)

(Siloxanes)

ANDRIANOV, K.A.; FROMBERG, M.B.; ZABYRINA, K.I.; SOROKINA, L.I.

Graft copolymers of polyorganosiloxanes and epoxide resins.

Vysokom.sped. 3 no.11:1692-1697 N '61.

(MIRA 14:11)

1. Vsesoyuznyy elektrotekhnicheskii institut imeni V.I. Lenina.  
(Silicon organic compounds)  
(Epoxy resins)  
(Polymers)

15.8120

39637  
S/191/62/000/008/003/013  
B124/B138

AUTHORS: Kholodovskaya, R. S., Gosteva, O. K., Zabyrina, K. I.,  
Spivak, N. M., Kirilovich, V. I.

TITLE: Development of electroinsulating impregnating masses  
containing no solvents. Impregnating masses based on 5H.  
(5N) epoxy resin

PERIODICAL: Plasticheskiye massy, no. 8, 1962, 14-16

TEXT: 5N resin was developed at the NIIPM and synthesized experimentally according to VPU-M-206-60 from epichlorohydrin and the condensation product of phenol and formaldehyde with HCl as catalyst. It contains up to 25-30% phenyl glycidine ether and chemically, it consists mainly of bis-glycidine ether of 4,4'-dioxo diphenyl methane with a small content of ethers of trinuclear compounds. The resins were intended for impregnating coils of electric motors working at 130-155°C. Experiments with polyalumophenyl siloxane as solidifier in amounts of 5% by weight showed that the resin set at 150°C in 10-15 min with a weight loss of less than 1%. Commercial polyester acrylates MCF-9 (MCF-9) and the pilot plant

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S/191/62/000/008/003/C13  
B124/B138

Development of electroinsulating ...

sample 7-1 developed by I. G. Sumin could be set with the same solidifier and possibly also without. Tests showed high resistance to heat and good dielectric properties (Table 2), low losses of weight (Table 3), and good binding strength (Table 4) of the impregnating masses developed. There are 2 figures and 4 tables. The English-language reference is: SPE Journal, No. 1, 38 (1959).

Table 2. Physicochemical and electrical properties of the copolymers\*.  
Legend: (A) mass, (B) viscosity according to VZ-4, sec, (C) drying time on copper or telephone paper at 150°C, min, (D) setting time in 1 mm thick layers at 150°C, min, (E) weight loss during setting (after 2 hrs at 150°C), %, (F) electric strength, kv/mm\*\*, (G) at 20°C, (H) at 155°C, (J) after 24 hrs in water at 20°C, (K) volume resistivity, ohm·cm, (L) tanδ at 50 cps, (M) 5N + 5% solidifier, (N) 7-1 + 5N + 5% solidifier, (P) MGF-9 + 5N + 5% solidifier, (R) \* I. N. Prozorova assisted in tests, (S) \*\* the dielectric properties were determined on disks 1 mm thick, hardened for 4 hrs at 150-160°C in aluminum molds.

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Development of electroinsulating ...

Table 3. Loss of weight in aging at 180°C (in %).

Legend: (A) mass, (B) aging time, hrs, (C) 5N + 5% solidifier,  
(D) 7-1 + 5N + 5% solidifier, (E) MCF-9 + 5N + 5% solidifier, (F) note:  
the loss of weight was determined on disks 0.8-1 mm thick.

Table 4. Change in binding strength of impregnating masses during aging  
at 180°C.

Legend: (A) mass, (B) test temperature, °C, (C) binding strength\* of the  
mass, kg, (D) in the initial state, (E) after aging, days, (F) 5N + 5%  
hardener, (G) 7-1 + 5N + 5% solidifier, (H) \* the binding strength is  
characterized by the force required to tear out the central part of a  
wire from a bundle of six copper wires impregnated with the compound  
investigated.

X

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Development of electroinsulating ...

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(A) Состав	(B) Вязкость по ВЗ-4 секунды	(C) Продолжительность высыхания на воздухе или температурой суше- ния при 150°C, минуты	(D) Продолжительность отверждения в воде толщиной 1 мм при 150°C, минуты	(E) Потери веса при отверждении (за 2 часа при 150°C), %	Электрическая прочность, кВ/мм** (F)			Удельное объемное сопротивление, Ом·см (K)			Тангенс угла ди- электрических по- терь при 50 Гц (L)	
					(G) при 20°C	(H) при 155°C	после проб- вания в воде в течение 24 часов при 20°C	(G) при 20°C	(H) при 155°C	после проб- вания в воде в течение 24 часов при 20°C	(G) при 20°C	(L) после проб- вания в воде в течение 24 часов при 20°C
5Н + 5% отвердителя (M)	60	10	15	1	32	13	31	$6 \cdot 10^{14}$	$3 \cdot 10^8$	$5 \cdot 10^{14}$	0,003	0,0085
7-1 + 5Н + 5% отвердителя (N)	78	10	15	1-2	27	25	26	$1 \cdot 10^{15}$	$4 \cdot 10^{10}$	$5 \cdot 10^{14}$	0,009	0,01
МГФ-9 + 5Н + 5% отвердителя (P)	36	2 часа отлип	10	1	27	—	27	$8 \cdot 10^{13}$	$7 \cdot 10^8$	$3 \cdot 10^{13}$	0,05	0,158

(P)\* В испытаниях принимала участие И. Н. Прохорова.  
(S)\*\* Диэлектрические свойства определяли в дисках толщиной 1 мм, отвержденных в алюминиевых формах при 160—165°C в течение четырех часов.

Table 2

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Development of electroinsulating ...

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B124/B138

Table 3

(A) Состав	(B) Продолжительность, старения, часы					
	24	48	120	240	480	720
(1) 5Н + 5% отвердителя	6,7	8,4	10,2	12,4	14	15
(2) 7-1 + 5Н + 5% отвердителя	4,5	6,5	7	7,6	8,6	9,2
(3) МГФ-9 + 5Н + 5% отвердителя	5,4	9	13,5	17,5	22	24

(F) Примечание. Потери веса определяли на образцах в виде дисков толщиной 0,8—1 мм.

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Development of electroinsulating ...

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Table 4

(A) Состав	(B) Температу- ра испытани- я, °C	(C) Цементирующая способность* состава, кг				
		(D) в исходном состоянии	(E) после старения, сутки			
			10	20	40	60
(F) 5H+5% отверди- теля	20	36	36	34	17,5	10,4
	155	8	15	13,5	10,5	9,7
(G) 7-1+5H+5% отвердителя	20	33	19,6	9	12	7,8
	155	18,9	11	8	11	9,3

(H)\* Цементирующая способность характеризуется усилием вырывания центрального отрезка проволоки из пучка в шесть медных проволок, пропитанного испытываемым составом.

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ANDRIANOV, K.A.; GOLUBKOV, G.Ye.; ZABYRINA, K.I.; DZHENCHEL'SKAYA,  
S.I.; KOLGANOVA, V.A.; BOLODAYEVA, N.I.

Thermoxidative degradation of polyphenylpolydimethylsiloxanes.  
Plant. massy no.2122-25 '64. (MIRA 1718)

ACCESSION NR: AP4043820

S/0303/64/000/004/0016/0021

AUTHOR: Belkina, T. M., Zaby\*rina, K. I., Limova, I. G., Fromberg, M. B.

TITLE: Binder coatings for mica insulation tapes, based on modified epoxy resins

SOURCE: Lakokrasochny\*ye materialy\* i ikh primeneniye, no. 4, 1964, 19-21

TOPIC TAGS: electric insulation tape, mica insulation tape, tape binder coating, tape saturation coating, modified epoxy resin, resin ED-6, resin E-40, polyester amide resin, binder coating insulating property, binder coating thermal stability, binder coating synthesis

ABSTRACT: The authors synthesized binders for synthetic mica insulation tapes intended for prolonged operation at 155C (heat resistance class F). The compositions were formulated from epoxy resins ED-6 or E-40 and polyester amide resins obtained by polycondensation of adipic acid, synthetic fatty acids, phthalic anhydride, glycerol and monoethylaniline. Tetraethoxysilane was used as the hardening agent. The hardening process is presented schematically and authors conclude that it represents a reaction between tetraethoxysilane and hydroxyl groups of the epoxy resin or the polyester, sometimes including a reaction between hydroxyl groups of the epoxy resin and alkoxy groups of the tetraethoxysilane. The synthesized coating retained viscosity of ~ 40 sec. over pro-

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ACCESSION NR: AP4043820

longed periods at an epoxy-polyester ratio of 100:40. Bonding capacity was best at 28.6% epoxy content. Saturation compounds and binders should contain 20-25% and 48-52% resin, respectively. Weight loss did not exceed 20-25% and bonding capacity remained at 25-30 kg over 30 days of heat aging. Thermal elasticity was 16-20 hrs. at 180C and up to 600 hrs. at 150C. Volume resistivity and dielectric strength values are also tabulated. "The mica insulation tape was prepared by O. M. Il'ina." Orig. art. has: 2 tables, 3 graphs and 1 chemical flow chart.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: MT, OC

NO REF SOV: 002

OTHER: 004

Card

2/2

ACCESSION NR: AP4043330

B/0191/64/000/008/0064/0067

AUTHOR: Belkina, T. M.; Zabyrina, K. I.; Limova, I. G.; Fromberg, M. B.

TITLE: Adhesives for film-coated electrical insulating board

SOURCE: Plasticheskiye massy\*, no. 8, 1964, 64-67

TOPIC TAGS: coating, adhesive, electrical insulation, insulating board, triacetate, polyethylene terephthalate, polyethylene, glyceroterephthalate, polyglycerophthalate, castor oil, Rezyl, acrylonitrile resin SKN-40, polyvinylformalethylal VL-7, alkydemelamine MGM-8, ethyl alcohol, toluene, acetone, bonding strength, alkydemelamine ML-92, polymer adhesive, polymer solubility, polyethylene film, silicic acid ester

ABSTRACT: The mechanical and dielectric properties of triacetate and polyethylene terephthalate films used for coating electrical insulating boards are tabulated and compared. For bonding polyethylene terephthalate films to electrical insulating boards, polymers such as polyethylene glyceroterephthalate, polyglycerophthalate modified with castor oil (Rezyl) and acrylonitrile resin SKN-40 dissolved in acetone or in a 1:1 mixture of alcohol and acetone, with different modifiers, were tested. Commercial lacquers such as polyvinylformalethylal VL-7 and alkydemelamines MGM-8 and ML-92 were also tested, using an electric adhesiometer on 6-mm-wide coated strips. The adhesive was applied to

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ACCESSION NR: AP4043330

the cardboard in a thin layer and dried for 3-4 min. at 90C before the polymer film was applied to it; the sample was then kept under a pressure of 15-20 kg/cm<sup>2</sup> at 90 + 5C. The highest bonding strength was obtained with the Rezyl resin 90, modified with the ethyl ester of o-silicic acid. A plot of the stability of the Rezyl compositions against the content of the ethyl ester of o-silicic acid showed that the gelatinization time of Rezyl diminishes considerably with increasing ester content. The viscosity of bonding compositions with different solvents was plotted against storage time at 20 + 5C. Stable compositions were obtained by dissolving them in a mixture of alcohol and toluene (1 : 1) or ethyl alcohol-toluene-acetone (1:1:1). They remained stable for 5 months during which time their viscosity remained almost unchanged. The Rezyl adhesive modified with the ethyl ester of o-silicic acid (23-7) applied to metal showed high heat-stability and very good electrical characteristics, which did not change significantly in a humid atmosphere. The characteristics of the composition 23-7 and those of the bonded insulating board are listed. Orig. art. has: 2 figures, 2 tables and 1 chemical equation.

ASSOCIATION: None

SUBMITTED: 00

SUB CODE: OC, MT

Card 2/2

NO REF SOV: 000

ENCL: 00

OTHER: 003

29739

S/190/61/003/011/010/016  
B110/B101

15 8121 22 09, 14 07

AUTHORS: Andrianov, K. A., Fromberg, M. B., Zabyrina, K. I., Sorokina, L. I.

TITLE: Graft copolymers from polyorganosiloxanes and epoxy resin

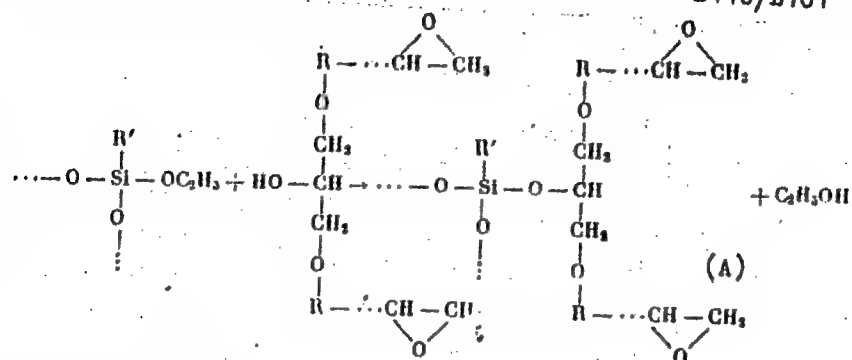
PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 11, 1961, 1692  
- 1697

TEXT: Polar groups bound to Si are introduced to increase the mechanical strength and the adhesion of polyorganosiloxanes (POS). Since the stability of the Si-radical bond is often reduced by such introduction, graft or block copolymerization with polymers containing polar groups is recommended. The functional groups contained in the copolymer also permit reactions with bifunctional groups for POS hardening at room temperature. Epoxy resins (I) catalyze polycondensations of POS:

$-Si-OH + HO-Si- \rightarrow -Si-O-Si- + H_2O$  to solid, unmeltable substances, particularly, if POS contain  $OCH_3$  or  $OC_2H_5$  groups. It is assumed that the alkoxy groups of POS react with the hydroxyl groups of I according to  
Card 1/5

Graft polymers from polyorganosiloxanes...

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S/190/61/003/011/010/016  
B110/B101



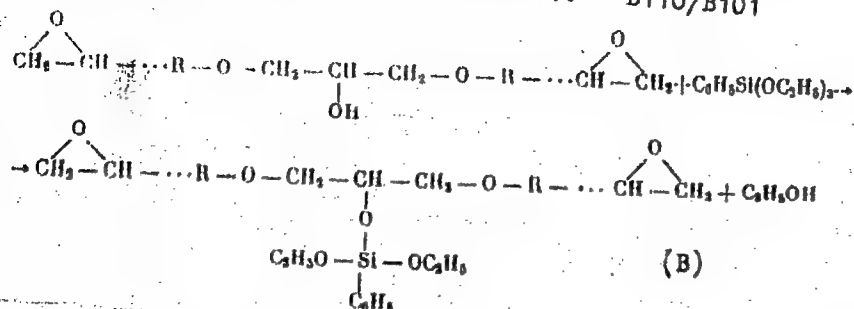
Phenyl triethoxy silane with I forms a homogeneous polymer with separation of  $\text{C}_2\text{H}_5\text{OH}$ ,

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Graft polymers from polyorganosiloxanes...

29739  
S/190/61/003/011/010/016  
B110/B101



For producing graft copolymers the authors used polydimethyl phenyl siloxanes (II) or polydimethyl phenyl methyl siloxanes (molecular weights: 1000 - 1500, OH content 1.0 - 2.0%) with 3 - 6% methoxyl or ethoxyl groups. They obtained these polymers by hydrolysis of a mixture of  $(\text{CH}_3)_2\text{SiCl}_2$  and  $\text{C}_6\text{H}_5\text{SiCl}_3$  or  $(\text{CH}_3)_2\text{SiCl}_2$ ,  $\text{CH}_3\text{SiCl}_3$ , and  $\text{C}_6\text{H}_5\text{SiCl}_3$  in water-alcohol medium. Since the dimension of the alkoxyl group considerably affects the thermal decomposition, polymers with  $\text{OCH}_3$  groups react at

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Graft polymers from polyorganosiloxanes... S/190/61/003/011/01C/016  
B110/B101

200 - 230°C, those with  $\text{OC}_2\text{H}_5$  groups at 280°C. No copolymer is formed at an alkoxy group content < 3%. The copolymerization is accompanied by separation of  $\text{C}_2\text{H}_5\text{OH}$  and decrease of epoxy groups, especially at increasing temperature. Investigations of the infrared spectra of polydimethylphenyl methoxy siloxanes (III) and graft copolymers based on them confirm the reaction mechanism described. Turbidimetric analyses showed the homogeneity of III and its graft copolymers. The presence of epoxy groups in the copolymers permits hardening by means of diamines (polyethylene diamine (IV), hexamethylene diamine (V), m-phenylene diamine, m-toluylene diamine) to nonthermoplastic varnish films which are highly thermoelastic at 200°C. The chemical nature of the hardener considerably affects the film properties. The high thermoelasticity of films hardened with IV and V is probably due to their evaporation at 200°C. Hardening is also performed at 130 - 150°C by means of polyphenyl siloxanes (VI). III heated at 200°C for 4 hr and at 250°C for 10 hr has  $T_v = 0^\circ\text{C}$ , an indistinctly marked range of highly elastic deformation, and it flows at 20°C. In graft copolymers based on III and hardened for 72 hr at 20°C by means of IV, the value of highly elastic deformation grows, and flowing

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Graft polymers from polyorganosiloxanes... 29739  
S/190/61/003/011/010/016  
B110/B101

starts at 150°C. Structuration at 20°C is slow. After 120 hr, the temperature range of highly elastic deformation was much wider, and the flow temperature  $T_f$  was 330°C. Graft copolymer hardened with IV for 2 hr at 200°C has a steric structure, an insignificant highly elastic deformation, and a flow temperature of 450°C. Structured polymer with a flow temperature of 425°C is formed by hardening with VI at 140°C within 2 hr. Varnish films from solutions of copolymers hardened at 130 - 150°C by means of VI form nonthermoelastic coats with higher mechanical strength and adhesion as coats from POS. There are 2 figures, 2 tables, and 2 Soviet references.

ASSOCIATION: Vsesoyuznyy elektrotekhnicheskiy institut im. V. I. Lenina  
(All-Union Electrotechnical Institute imeni V. I. Lenin)

SUBMITTED: December 25, 1960

Card 5/5

ZABYRINA, K.I.; FROMBERG, M.B.

Possibility of using bitumen solutions for the manufacture of  
black lacquers. Lakokras. mat. 1 ikh prim. no.5:69 '63.  
(MIRA 16:11)

1. Vsesoyuznyy elektrotekhnicheskiy institut imeni V.I. Lenina.

S/661/61/000/006/069/081  
D247/D302

AUTHORS: Fromberg, M. B., Andrianov, K. A. and Zabyrina, K. I.  
TITLE: Block polymers from polyorganic silicones for electrical insulating coatings for air drying

SOURCE: Khimiya i prakticheskoye primeneniye kremneorganicheskikh soyedineniy; trudy konferentsii, no. 6: Doklady, diskussii, resheniye. II Vses. konfer. po khimii i prakt. prim. kremneorg. soyed., Len. 1958. Leningrad, Izd-vo AN SSSR, 1961, 299-300

TEXT: The text is in the form of a discussion in which A. F. Moiseyev (Moscow) took part. Some thermal and mechanical properties of the polymers (thermostable up to 200°C) are mentioned, and indirect evidence for their block structure is given.

ASSOCIATION: Vsesoyuznyy elektrotekhnicheskiy institut im. V. I. Lenina, Moskva (All-Union Electrotechnical Institute im. V. I. Lenin, Moscow)

Card 1/1

24,2700

69246

SOV/112-59-17-35821

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 17, p 12 (USSR)

AUTHORS: Andrianov, K.A., Gribanova, O.I., Zabyrina, K.I., Chernichkina, A.S.

TITLE: Heat Resistant Electro-Insulating Varnishes on the Base of Silico-Organic Compounds

PERIODICAL: Tr. Vses. elektrotekhn. in-ta, 1958, Nr 62, pp 16-28

ABSTRACT: The heat resistance of silico-organic polymers depends to a great extent on the nature of the organic radical. So, with an increase of the organic radical of the aliphatic series (for instance at a transition from methyl to ethyl) the heat resistance decreases. With an increase of the aromatic radical the heat resistance decreases also. Dielectric characteristics ( $\rho$ ,  $\tan \delta$ ,  $\epsilon$ ) of silico-organic polymers are relatively little dependent on temperature. It can be assumed that this is connected with the low mobility of the chains of these polymers owing to the presence of cross links and with the greater rigidity of siloxan bonds. In order to increase the mechanical strength and adhesion of silico-organic polymers, polar groups must be introduced in organic radicals. Depending on molar relations of initial products, resins and varnishes based on them of various purposes and with

Card 1/2

69246

SOV/112-59-17-35821

Heat Resistant Electro-Insulating Varnishes on the Base of Silico-Organic Compounds  
various heat resistances were obtained. Properties and application of varnishes EF-3,  
EF-5, K-44, K-47, K-48 are briefly described.

A.O.M.

Card 2/2

KHOLODOVSKAYA, R.S.; ZABYRINA, K.I.; SMOLENSKIY, L.S.

Electrical insulation properties of lacquers based on condensed fatty acids. Lakokras.mat.1 ikh prim. no.1:37-39 '62.

(MIRA 15:4)

(Lacquer and lacquering)

(Electric insulators and insulation)

(Acids, Fatty)



KHOLODOVSKAYA, R.S.; GOSTEVA, O.K.; ZABYRINA, K.I.; SPIVAK, N.M.;  
KIRILOVICH, V.I.

Development of compositions for the impregnation of electric  
insulation materials containing no solvent; impregnation com-  
positions with 5N epoxy resin base. Plast.massy no.8:14-16  
62. (MIRA 15:7)  
(Electric insulators and insulation) (Epoxy resins)

247700

69247

SOV/112-59-17-35822

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 17, p 12 (USSR)

AUTHORS: Andrianov, K.A., Zabyrina, K.I.

TITLE: Silico-Organic and Organic Polymers, and Dielectrics Based on Them

PERIODICAL: Tr. Vses. elektrotekh. in-ta, 1958, Nr 62, pp 29-42

ABSTRACT: Properties of organic and silico-organic polymers are discussed. The structure of molecules exercises a great influence on properties of polymers. An increased frost-resistance and poor mechanic properties of silico-organic polymers are explained by low polarity and a weak interaction of molecules. The relaxation character of dielectric losses of silico-organic polymers caused by temperature is determined by the polar bond - Si - O -. The silico-organic polymers compared with the organic polymers, have an increased thermoelasticity. Properties and fields of application of some dielectrics based on organic and silico-organic polymers are briefly described. There are 4 references.

A.O.M.

Card 1/1

24,7700

69248

SOV/112-59-17-35823

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 17, pp 12-13 (USSR)

AUTHORS: Andrianov, K.A., Dzhenchel'skaya, S.I., Zabyrina, K.I.

TITLE: On the Influence of Oxides and Hydroxides of Metals on the Properties of Electro-Insulating Polyphenylethylsiloxane Films

PERIODICAL: Tr. Vses. Elektrotekh. in-ta, 1958, Nr 62, pp 192-204

ABSTRACT: Polyorganosiloxane polymers begin to be widely used as coatings of metals. Therefore, it is important to study the processes taking place between polyorganosiloxanes and oxides of metals and the influence of these oxides on the properties of films. Heat resistance, the time of drying, hydrophobic degree, thermal convertibility and electric properties of films made of polyphenylethylsiloxane resin as well as of oxides and hydroxides of some metals were studied. Varnish (solvent - toluene) was mixed with various fillers:  $MgO$ ,  $MgSO_4$ ,  $CaCO_3$ ,  $BaSO_4$ ,  $ZnO$ ,  $Al_2O_3$ ,  $Al$  hydroxide,  $Cr_2O_3$ , iron minimum  $Pb_3O_4$ ,  $TiO_2$ . The highest rate of gelatinization was observed at introduction into the varnish of red lead and  $Cr_2O_3$ . A great influence on the increase of the thermoelasticity have  $MgO$  and  $Cr_2O_3$ ,  $Al$  hydroxide and  $BaSO_4$ . At introduction into polyphenylethylsiloxane resin of mica

Card 1/2

69248

SOV/112-59-17-35823

On the Influence of Oxides and Hydroxides of Metals on the Properties of Electro-Insulating Polyphenylethylsiloxane Films

powder (50% of the varnish base) the heat resistance increases approximately 10 times compared with the film without mica. At introduction into polyphenylethylsiloxane of some siccatives -- linoleates and naphthenates of Co, Mn and others not only an accelerated drying is observed, but also an increase in thermoelasticity of the films. By their influence on the thermal convertibility of film, the substances studied can be arranged (in descending order) in the following row: red lead,  $TiO_2$ ,  $CaCO_3$ ,  $Cr_2O_3$ , Al hydroxide,  $CuO$ , iron minium. Films with Al hydroxide baked at  $150^\circ C$  contain 0.53 - 0.71% Al (in terms of  $Al_2O_3$ ) in the soluble part of the polymer, which shows the presence of an interaction of Al hydroxides with the polymer. At introduction of red lead and pure Pb hydroxide into polyphenylethylsiloxane resin a thermal effect is observed. Films with red lead dried at  $110^\circ C$  have high electro-insulating properties at temperatures up to  $200^\circ C$  and 98% relative humidity.

A.O.M.

Card 2/2

SOV/81-59-12-44301

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 12, p 495 (USSR)

AUTHORS: Andrianov, K.N., Gribanova, O.I., Zabyrina, K.I., Chernichkina, A.S.

TITLE: Heat-Resistant Electric Insulation Varnishes Based on Silicon-Organic Compounds

PERIODICAL: Tr. Vses. elektrotekhn. in-ta, 1958, Nr 62, pp 16-28

ABSTRACT: Electric insulation varnishes based on polymeric silicon-organic compounds containing siloxane Si-O-Si bonds form a new type of insulation with operation temperatures of up to 180°C. The properties and possible application fields have been described of the polymethylphenylsiloxane resin K-40, of the gluing and coating varnishes K-44, K-47, K-48 based on modified K-40, of the gluing and coating varnish EF-5 and the impregnating varnish EF-3 based on polyethylphenylsiloxane resin. The silicon-organic varnishes are more advantageous than those on organic base (bitumen-oil and glyphthalic varnishes) with respect to their heat- and water-resistance and the dependence of the dielectric characteristics on the temperatures.

M. Narkova

Card 1/1

15.7140

S07/81-59-12-44295

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 12, pp 494-495 (USSR)

AUTHORS: Andrinov, K.A., Dzhenchel'skaya, S.I., Zabyrina, K.I.

TITLE: On the Effect of Metal Oxides and Hydroxides on the Properties of Electric Insulation Polyphenylethylsiloxane Films

PERIODICAL: Tr. Vses. elektrotekhn. in-ta, 1958, Nr 62, pp 192-204

ABSTRACT: The effect of various metal oxides and hydroxides (Mg oxide (I), Mg sulfate (II), Ca carbonate, Ba sulfate (III), Zn oxide (IV), Al oxide (V), Al hydroxide (VI), Cr oxide (VII), iron minium (VIII), lead minium (IX),  $TiO_2$ ) on the physical-chemical (heat-resistance, drying time, hydrophobic nature, thermal transformability) and electrical properties of films (F) of polyphenylethylsiloxane resin (PES) has been studied. It has been established that I, III, VI and VII have a great effect on the increase of the thermal elasticity (TE) of PES. The greatest increase in the thermal resistance and heat impact of the films is obtained by introducing mica powder, kaolin or I into PES. TE also depends on the quantity of the introduced fillers (Fi) and

Card 1/2

67997

SOV/81-59-12-44295

On the Effect of Metal Oxides and Hydroxides on the Properties of Electric  
Insulation Polyphenylethylsiloxane Films

the thickness of the investigated F. Based on PES and several Fi the enamel PRKE-13<sup>6</sup> was obtained which is applicable as coating enamel for operation temperatures of 180°C and as impregnation substance for obtaining heat-resistant glass-varnish fabrics. With the aim of investigating the effect of films of chemical nature and of the structure of polyorganosiloxane resins on TE, films were prepared and investigated based on modified organic polyesters and unmodified I, polyphenyl- and polyphenylmethylsiloxane resins (PMS). The pigmentation was carried out according to the prescription and technology developed for PRKE-13. It has been established that enamels more heat-resistant than PRKE-13 are obtained on the base of unmodified MPS. The introduction of siccatives and antioxidants into the enamel sharply increases their thermoelastic properties. The study of filled F has shown that at heating of F at 100°C the transformation of polymers from linear into joint and three-dimensional polymers takes place, which is accompanied by a loss of solubility of F. The degree of transformation depends on the character of the Fi. At heating of F filled with VI, at 150°C VI interacts with the polymer. The investigation of the effect of the character of Fi on the hydrophobic nature of polyorganosiloxane F has shown that the least moisture-absorption have F containing II, III, IV, V and IX, and the least moisture penetrability have F containing VI and VIII.

M. Barkova

KHOLODOVSKAYA, R.S.; ZABYRINA, K.I.; SPIVAK, N.M.; Prinsipalno uchastiye  
SOBOLEVA, V.G.

Synthesis of terephthalic polyesters and their use as a base for  
the production of impregnation lacquers for electric insulation  
materials. Lakokras.mat. i ikh prim. no.3:12-16 '63. (NERA 16:9)  
(Terephthalic acid) (Protective coatings)  
(Electric insulators and insulation)



ANDRIANOV, Kuz'ma Andrianovich. Prinimali uchastiye: PARKSHEYAN, Kh.R.;  
ROMANOV, R.G.; SEMENKO, P.Ya.; ZABYRINA, K.I., red.;  
KALITVANSKIY, V.I., red.; KORITSKIY, Yu.V., red.; KHVAL'KOVSKIY,  
A.V., red.; EPSHTEYN, L.A., red.

[Macromolecular compounds for electrical insulation] Vysoko-  
molekuliarnye soedineniia dlia elektricheskoi izoliatsii. Mo-  
skva, Gos. energ.izd-vo, 1961. 327 p. (Polimery v elektroizo-  
liatsionnoi tekhnike, no.1) (MIRA 15:2)  
(Electric insulators and insulation) (Polymers)

ZABYRINA, K.I., kand.tekhn.nauk; FROMBERG, M.B., kand.tekhn.nauk

Use of polymers in electrical insulation. Vest.elektroizoz.

33 no.2:50-55 F 162.

(Polymers)

(Electric insulators and insulation)

(MIRA 15:2)

ZABYRINA, E.I., kand. tekhn. nauk; FROMBERG, M.B., inzh.

Heat-resistant electric-insulating enamels. Vest. elektroprom. 27  
no.8:17-23 Ag '56. (MLHA 10:9)

1. Vsesoyuznyy elektrotekhnicheskiy institut imeni V.I. Lenina.  
(Enamel and enameling)

ANDRIANOV, K.A.; GRIBANOVA, O.I.; ~~ZABYRINA~~, K.I.; CHERNICHKINA, K.I.

Heat resistant and electrically insulating varnishes prepared on  
the basis of silicon organic compounds. Trudy VNI no.62:16-28  
'58.

(MIRA 11:11)

(Electric insulators and insulation) (Varnish and varnishing)

ZABRZEWSKI, K.

Physicochemical properties of albumins; the 4th International Congress of Biochemistry. p. 265.

POSTĘPY BIOCHEMII. (Polska Akademia Nauk. Komitet Biochemiczny) Warszawa, Poland. Vol. 5, no. 3, 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 1, Jan. 1960.

Uncl.

VARDENBURG, Arnol'd Kurtovich; ANDRIANOV, K.A., glavnyy red.;  
ZABYRINA, K.I., red.; KALITVYANSKIY, V.I., red.; KORITSKIY,  
Yu.V., red.; KHVAL'KOVSKIY, A.V., red.; EPSHTEIN, L.A.,  
red. [deceased]; SHISHKIN, S.V., red.; BORUNOV, N.I.,  
tekhn.red.

[Plastics in the electric equipment industry] Plastiicheskie  
massy v elektrotekhnicheskoi promyshlennosti. Izd.3., perer.  
i dop. Moskva, Gosenergoizdat, 1963. 284 p. (Polimery  
v elektroizolatsionnoi tekhnike, no.5)

(MIRA 16:3)

(Plastics)

(Electric equipment industry)

ANDRIANOV, K.A.; ZABYRINA, K.I.

Silicon organic and organic polymers and dielectrics on their  
basis. Trudy VNI no.62:29-41 '58. (MIRA 11:11)  
(Polymers) (Dielectrics)

AUTHORS: Zabyrina, K. I., Candidate of Technical Sciences, Fromberg, M. B., Candidate of Technical Sciences SOV/105-58-8-6/21

TITLE: Lacquer Polymers in Electric Insulation (Lakovyye polimery v elektricheskoy izolyatsii)

PERIODICAL: Elektrichestvo, 1958, Nr 8, pp. 28-37 (USSR)

ABSTRACT: At present, trends to replace natural raw materials, primarily nutritive plant oils, by new synthetic materials with better properties attain increasing importance. They are derived from various polyesters, epoxy resins, melamino formaldehyde resins, polyurethanes, polyamides, polyvinylacetals and other coating forming substances. Lacquer polymers on a basis of a new type of high-molecular substances, the polyorganosiloxanes are widely applied. Their application in electrical industry furnished a possibility to take up mass production of electrical equipment of H-grade insulation quality for operational temperatures of 180°C and in some cases even of from 250-300°C (Refs 1,2). These polymers permit to increase considerably the damp resistivity of insulation, the operational safety of electrical machines and to reduce the consumption of material. A survey of

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Lacquer Polymers in Electric Insulation

SOV/105-58-8-6/21

these lacquer polymers is given. 1) Polyesters fall into three groups with respect to the character of the components. a) Resins on the basis of polybasic acids and polyatomic alcohols which solidify on heating. b) Resins on the same basis, combined with unsaturated glycerites, fatty acids of volatile oils or with other compounds which solidify in the cold as well as in the heat. c) Resins on the same basis, to which unsaturated monomers were introduced. The lacquers used at present on the basis of modified polyester resins comprise: a) Impregnating lacquers, "glyphthal lacquer G-95", b) adhesive lacquers - "glyphthal lacquer 1158 CM 2", and "TGF -6 and TGF -8" c) Protective lacquers - grey arc-proof enamels, red enamels and the "nitroglyphthal enamel 1201" (air dried).

2) Polyurethanes: These lacquers have a considerable disadvantage. They can only be stored for a short period. This disadvantage was abolished by the introduction of latent diisocyanates. Recently, methods have been developed for the production of lacquer textures and glass-lacquer textures on the basis of polyurethane lacquers. On the same basis lacquer wires were developed. 3) Epoxy resins. The valuable properties of lacquer coatings from epoxy resins are a reason for their

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Lacquer Polymers in Electric Insulation

SOV/105-58-8-6/21

application as insulation coatings. At present OEP-341-1 and E-4100 have been developed and are already in use. 4) Polyamides. Lacquers on the basis of polyamide polymers combined with phenol formaldehyde resins are used for the production of highly resistive wires of the type FELR. 5) Polyvinylacetals. In the USSR, the polyvinylacetal lacquers "Metal'vin" are produced as enamel lacquers for highly resistive enamel wires, which are based upon polyvinyl formal and phenol-formaldehyde resin. The lacquer "Vinifleks" is produced on the basis of mixtures of acetal and phenol formaldehyde resin. 6) Polyorganosiloxanes. A perfection of the mechanical properties is achieved by the introduction of polar groups or of compounds of organic polymers with polar groups into the organic radical. The two principal schemes for the production of polyorganosiloxanes are given. A survey is given on the impregnating and protective lacquers produced on this basis and used in the USSR. There are 5 figures, 8 tables, and 35 references, 20 of which are Soviet.

Card 3/4

Lacquer Polymers in Electric Insulation

SOV/105-58-8-6/21

ASSOCIATION: Vsesoyuznyy elektrotekhnicheskii institut im. V. I. Lenina. (VEI).  
(All-Union Electrotechnical Institute imeni V. I. Lenin)

SUBMITTED: June 7, 1958

1. Electrical equipment--Insulation      2. Insulation (Electric)--Pro-  
duction      3. Polymers--Applications      4. Varnishes

Card 4/4

ANDRIANOV, K.A.; DZHENCHEL'SKAYA, S.I.; ZABYRINA, K.I.

Effect of metal oxides and hydroxides on the properties of electrically insulating polyphenylethylsiloxane films. Trudy VNI no.62: 192-204 '58. (MIRA 11:11.)  
(Metallic oxides) (Siloxanes)

ZABYSRZAN, J.

Screw-cutting machine for the speedy cutting of threads. p. 454

TECHNICKA PRACE (Slovenske nakladatelstvo technickej literatury)  
Vol. 8, No. 10, Oct. 1956

Bratislava, Czechoslovakia

SOURCE: East European List (EEAL) Library of  
Congress, Vol. 6, No. 1, January 1957

ZABYSTRZAN, J.

Thread master gauge for adjustment of snap thread gauge.  
Stroj vyr 11 no.5:259 Ky '63.

1. Zavody presneho strojirenstvi, n.p. Gottwaldov.

ZABYSTRZAN, J.

Measurement of screw threads with a diameter over 200 mm. p. 399

TECHNICKA PRACA. Czechoslovakia Vol. 7, No. 9, Sept. 1955

Monthly List of East European Accessions (SEAI), LC. Vol, 8, No. 9, September 1959  
Uncl.

ZABYSTRZAN, P

"Present-day economic problems in the field of coal derivative products."

p. 81 Wkoks, Smolca, Gaz, Vol 3, no. 3, May/June 1958

Monthly Index of East European Accessions (EEAI) LC, Vol. 8, no. 1, Jan 59



Zabystrzan, P.

POLAND / Chemical Technology. Chemical Products and Their Application. Processing of Solid Fuel Minerals. H

Abs Jour: Ref Zhur-Khimiya, No 9, 1959, 32712.

Author : Zabystrzan, P.

Inst : Not given.

Title : Essential Economic Problems in the Industrial Field of the Coal Tar Chemical By-Products.

Orig Pub: Koks, smola, gaz, 1958, 3, No 3, 81-84.

Abstract: A technical economic review is submitted by the Polish coal tar chemical industry from the point of view of obtaining resins, benzenes and a great number of other coal tar chemical by-products. Measures for the improvement of the industry's efficiency are recommended. -- U. Andros.

Card 1/1

241

ZABYSTRZAN, Pawel

Coal derivatives. Przem chem Special issues:28-31 '58.

Country : Poland  
Category : H-22  
Abs. Jour. : 39975  
Author : Zabyszczyan, P.  
Instituted : ~~Not given~~  
Title : Coke Oven Byproducts  
Orig Pub. : Przemysl Chem, 37, Spec Ed, 28-31 (1958)  
Abstract : The author lists the commercial products produced from Polish cokes and exported. A characterization of the products is included.  
S. Rozenfel'd

Card: 1/1

ZABYSTRZAN, P.

Problem of tar in the building industry. 1. Development of the production and market of tars for building. p. 221, Vol. 11, no. 5, May 1955, PRZEMISL

CHEMICZNY

SO:MONTHLY LIST OF EAST EUROPEAN ACCESSIONS, (EEAL), LC, Vol. 4, No. 9, Sept. 1955, Uncl.

1ST AND 2ND COURSES										PROCESSES AND PROPERTIES INDEX										3RD AND 4TH COURSES									
<p>Oxidizing steel and iron goods. E. I. Zakharenko, Russ. 31,210, Sept. 30, 1933. In the oxidation of steel and iron goods by a treatment with hot concentrated alkalis contg. nitrates and other oxidizing agents, and salts of Ba, Ca and other metals, the formation of passive skins is prevented and the steel or iron surface is activated by introducing chlorides into the oxidizing bath.</p>																													
<p>ASTM-A.I.A. METALLURGICAL LITERATURE CLASSIFICATION</p>																													
<p>10000 00</p>										<p>10000 00</p>										<p>10000 00</p>									

ea

9

Oxidation of iron or steel articles. <sup>Y</sup>H. J. Zaly <sup>Y</sup>v.  
Russ. 64, 823, April 30, 1959. The articles are treated with  
an aq. soln. of  $\text{NaNO}_3$ ,  $\text{NaCl}$  and  $\text{Bi}(\text{NO}_3)_3$  or  $\text{Cu}(\text{NO}_3)_2$   
at about  $110^\circ$ .

ASM-A METALLURGICAL LITERATURE CLASSIFICATION

COMMON ELEMENTS										PROCESSES AND PROPERTIES INDEX										100 AND 400 LINES									
<p>Protective film on iron, steel and aluminum. Ye. I. Zabyevsky and I. I. Kirshov. Russ. 36/437, Nov. 30, 1939. The metals are treated with a soln. of saltpeter, <math>\text{CuCO}_3</math>, <math>\text{Cr}_2\text{O}_3</math> and <math>\text{H}_2\text{O}</math> at a temp. not over <math>115^\circ</math>.</p>																													
<p>ASA-ILA METALLURGICAL LITERATURE CLASSIFICATION</p>																													
<p>100 AND 400 LINES</p>										<p>100 AND 400 LINES</p>										<p>100 AND 400 LINES</p>									

ZARYVAYEV, Ye. I., Engr. Cand. Tech. Sci.

Dissertation: "Oxidation of Steel and its Practical Application." Central Sci. Res. Inst. of Technology and Machine Building - TsNITRASH, 21 Apr 47.

SO: Vechernyaya Moskva, Apr, 1947 (Project #17636)



ZABYVAYEV, Ye.I., dotsent, kandidat tekhnicheskikh nauk.

Corrosion resistant fluxes for soldering steel products. [Trudy]

(MIRA 7:10)

MVTU no.24139-42 '53.

(Corrosion and anticorrosives) (Solder and soldering)

ZABYVAYEV, Ye. I.

ABRAMOVICH, I.I., prof., ANBINDER, A.G., inzh., ANTOSHIN, Ye.V., inzh.,  
 ARKHANGEL'SKIY, L.A., inzh., ASTAF'YEV, S.S., kand. tekhn. nauk,  
 AFANAS'YEV, L.A., inzh., BAROSHTEYN, I.I., inzh., BORISOV, Yu. S.,  
 inzh., red., BYALYY, I.L., inzh., VERVITSKIY, A.M., inzh., GERSHMAN,  
 D.Kh., inzh., GINZBURG, Z.M., inzh., GOROSHKIN, A.K., inzh.,  
 YEVDOKIMCHIK, Kh.I., inzh., ZHUKH, V.A., kand. tekhn. nauk,  
 ZABYVAYEV, Ye. I., kand. tekhn. nauk, [deceased], ZOBIN, V.S., inzh.,  
 IVANOV, G.P., kand. tekhn. nauk, KAPRANOV, P.N., inzh., KONDRATOVICH,  
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 1958, 1059 p. (MIRA 11:10)

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A new stereospecific method of obtaining  $\alpha, \beta$ -unsaturated secondary and tertiary alcohols. Pt. 2. Roczniki chemii 37 no. 7/8:773-785 '63.

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Use of xylocaine spray in obstetric and gynecological surface anesthesia. Ginek. Pol. 35 no.5:717-719 8-0 '64

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L 41769-66 EWP(1) JAJ/RH (N) SOURCE CODE: PO/0079/66/040/003/0463/0467  
ACC NR: AP6031699

AUTHOR: Zabza, Andrzej; Kucznyski, Henryk

ORG: II Department of Organic Chemistry, Wroclaw (Katedra Chemii Organicznej  
II Politechniki)

TITLE: Stereochemistry of the carene system. (+)-carene-4-one-3 and carene-3-dione-2,5

SOURCE: Roczniki chemii-Annales societatis chimicae polonorum, v. 40, no. 3, 1966, 463-467

TOPIC TAGS: chemical synthesis, stereochemistry

ABSTRACT: The paper describes the synthesis of (+)-carene-4-one-3 from (+)-carene-4-ol-3 previously obtained by means of stereoselective synthesis. The crystalline carene-3-dione, 25 was isolated from the autoxidation products of (+)-carene-3. The IR spectra were recorded with UR10 spectrophotometer (Zeiss) in the Institute for Organic Chemistry and Biochemistry, CSAV, Prague, for which the authors thank Engineer J. Smolikova. The UV Spectra were recorded with a Unicam SP700 spectrophotometer in the Central Laboratory of the Chemistry Department, Technical College, Wroclaw, for which the authors thank Doctor A. Sobczyk for recording the spectra. Orig. art. has: 1 figure. [Orig. art. in German] [JPRS: 36,002]

SUB CODE: 07 / SUBM DATE: 16Sep65 / ORIG REF: 001 / OTH REF: 013

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Statistical investigation of solar activity. Acta astronomica  
12 no.3:210-219 '62.

1. Astronomical Institute, University, Wrocław.

L 43355-66

ACC NR: AT6020493

SOURCE CODE: CZ/2514/65/000/051/0039/0040

22  
3+

AUTHOR: Jakimiec, J.; Zabza, M.

ORG: Astronomical Institute of Wroclaw University

TITLE: Preliminary computations of the construction of detailed models of  
sunspots

SOURCE: Ceskoslovenska akademie ved. Astronomicky ustav. Publikace, no. 51,  
1965. 3rd Consultation on Solar Physics and Hydromagnetics, Tatranska Lomnica,  
13-16 October 1964, 39-40

TOPIC TAGS: sunspot, photosphere, magnetic tube, sunspot model

ABSTRACT: The authors consider only the shallow regions of a sunspot defined in a previous paper. Adjustment of the scale of depth in the spot to the scale in the photosphere is made on the basis of the results of recent examinations of the Wilson effect (Chistyakov, 1961 and 1962); the depth of the spot is  $\sim 1000$  km. Observations show the thermodynamic parameters for the axis of the spot and outside the spot. The magnetic field for a plane  $z = z_0$ . There appears to be no single solution to the

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AT6020493

problem of constructing a model of the spot. A set of admissible models must be computed and then the best one chosen. A complete model, for which the computations are the simplest, has been computed. The distribution of temperature then obtained is shown to be incompatible with a real spot. In conclusion, the authors state that the computation of each model should be started by assuming the distribution of the temperature across the model. A full account of the present work will be published in Acta Astronomica. In the discussion at the end of the article, one of the authors states that a single magnetic tube is a good representation of a round stable spot. [GC]

SUB CODE: 03/ SUBM DATE: none/ ORIG REF: none/ SOV REF: 002/  
OTH REF: 003/

Card 2/2 11b



L 01272-57

ACC NR: AP6026458

SOURCE CODE: PO/0009/66/016/001/0073/0079

AUTHOR: Jakimiec, J. ; Zabza, M.

ORG: Astronomical Institute, Wroclaw University

TITLE: Magnetostatic models of sunspots. Part II

SOURCE: Acta astronomica, v. 16, no. 1, 1966, 73-79

TOPIC TAGS: solar astronomy, sunspot, sunspot model

ABSTRACT: In paper I Coauthor J. Jakimiec (Acta astronomica, no. 15, 1965, p. 145) presented principles for modeling a spatial sunspot and discussed difficulties to be expected in its construction. This was followed by establishment of a research program to find a model of surface-layers of the sunspot conforming best to observational data. The program involves the calculation of a whole set of such models, each requiring many computations. The authors intent to make consecutive models which will be ever closer approximations of a true sunspot. The first to be computed was a representative model according to the principles expressed in paper I serving as the basis for all subsequent models. According to the authors this sample model does not fully correspond

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B

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ACC NR: AP6026458

to a true sunspot. Ways of improving it are discussed. Orig. art. has:  
3 figures, 1 tables, and 4 formulas. [Based on authors' abstract]

0  
[DR]

SUB CODE: 03/ SUBM DATE: none/ ORIG REF: 001/

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On a stereospecific way of representing the  $\alpha, \beta$ -unsaturated alcohols.  
Bul chim PAN 9 no.9:551-554 '61.

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true increase as factors such as defective mortality registration, quality  
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(PUBLIC HEALTH,

statist., role of morbidity ratio)

(VITAL STATISTICS,

morbidity, role in pub. health statist.)



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